AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method of measuring the amount of a–25-hydroxy vitamin D metabolite, and 1α,25-dihydroxy vitamin D metabolite or both in a sample using a competitive protein binding assay, wherein comprising measuring displacement of a vitamin D derivative derivative of formula (I) from a vitamin D binding protein is measured and the vitamin D derivative displaces a by 25-hydroxy-vitamin D or lα,25-dihydroxy vitamin D metabolite or both from the vitamin D binding protein,

wherein a displacement efficiency of approximately 1 is obtained by using a vitamin D derivative of formula (I):

wherein:

- R represents a 25-hydroxylated side-group of vitamin D₂ or of vitamin D₃;
- Y represents hydrogen or hydroxy;
- and wherein the measurement of correlating the measurement of displacement of a-the vitamin D derivative of formula (I) from athe vitamin D binding protein in the sample is correlated to the measurement of displacement of a-the vitamin D derivative of forumula (I) from athe vitamin D binding protein using a known quantity of the vitamin D derivative of formula (I) to determine the amount of a-25-hydroxy vitamin D metabolite, and 1α,25-dihydroxy vitamin D metabolite or both in the sample.

Application No. 10/790,746 Amendment dated August 5, 2009 Reply to Office Action of February 5, 2009

- 2 (**Original**) The method of claim 1, wherein the method is a competitive immunoassay, selected from the group consisting of radioimmunoassay, enzyme immunoassay enzyme-linked immunosorbent assay, luminescence immunoassay and fluorescence immunoassay.
- 3. (**Original**) The method of claim 1, wherein the method is sandwich immunoassay, selected from the group consisting of immuno radiometric assay, IEMA/EIA, immuno luminometric assay and immunofluorometric assay.
- 4. (Currently Amended) A kit for detection of 25-hydroxy-vitamin D or 1α/25-1α, 25-dihydroxy vitamin D metabolites-or both in a sample on by basis-of-a competitive protein binding assay, wherein displacement of a vitamin D derivative of the formula (I) from a vitamin D binding protein is measured and the vitamin D derivative displaces a-25-hydroxy-vitamin D or lα,25-dihydroxy vitamin D metabolite-from the vitamin D binding protein, comprising a standardized quantity of a solid vitamin D derivative of formula (I) or a standardized solution of a vitamin D derivative of formula (I):

wherein:

R represents a 25-hydroxylated side-group of vitamin D_2 or of vitamin D_3 ;

Docket No.: 0756-0124P

Y represents hydrogen or hydroxy;.

5-6. (Cancelled)

7. (Original) The kit of claim 4 comprising a solid phase selected from the group consisting of

a microtitration plate, another solid carrier, a microparticle, a polymeric material, and a

cellulose.

8. (Original) The kit of claim 7, in which the solid phase is a microparticle comprising

agarose.

9. (**Original**) The kit of claim 7, in which the solid phase is a magnetic microparticle.

10. (Canceled)

11. (Previously Presented) The method of claim 1, wherein said competitive protein binding

assay is selected from the group consisting of an enzyme immunoassay, an enzyme-linked

immunosorbent assay, a radio immunoassay, an immunoradiometric assay, a luminescence

assay, a fluorescence immunoassay and an immunofluorometric assay.

12. (Previously Presented) The method of claim 1 wherein Y is hydroxy.

13. (Previously Presented) The kit of claim 4 wherein Y is hydroxy.

14. (New) The method of claim 1, wherein the 25-hydroxy vitamin D is removed from the

sample before performing the competitive protein binding assay.

15. (New) The method of claim 1, in which an antibody that specifically binds $1\alpha,25$ -dihydroxy

4

vitamin D is used in the competitive protein binding assay.

DRN/MHE/cjd